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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,597	01/18/2002	Lothar Finzel	44316/242361	3095
21495	7590	03/22/2004	EXAMINER	
CORNING CABLE SYSTEMS LLC			MAYO, TARA L	
P O BOX 489			ART UNIT ,	
HICKORY, NC 28603			PAPER NUMBER	
			3671	

DATE MAILED: 03/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/051,597

Applicant(s)

FINZEL ET AL.

Examiner

Tara L. Mayo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 123-167 and 169-171 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 123-127, 129-154 and 156-160 is/are allowed.
- 6) ☒ Claim(s) 161, 164-167 and 169-171 is/are rejected.
- 7) ☒ Claim(s) 128, 155, 162 and 163 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 011802 and 120503.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05 December 2003 has been entered.

***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

3. The citations lined through on the Information Disclosure Statements filed 18 January 2002 and 05 December 2003 have already been considered by the Examiner.

4. The information disclosure statement filed 05 December 2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information

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referred to therein has not been considered. Specifically, Applicant has not filed a copy of German Patent No. 7606741.

### *Claim Objections*

5. Claims 128, 155, and 169 are objected to because of the following informalities: improper Markush type claim.

In claim 128 on line 3, immediately following "group" and prior to "of" insert --consisting--. Repeat the correction for claims 155 and 169. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 161, 165 through 167, and 169 through 171 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaylin (U.S. Patent No. 4,896,997) in view of Kasiewicz (U.S. Patent No. 4,437,789).

Gaylin '997, as seen in Figure 5, discloses a fiber optic installation (col. 1, lines 6 through 13) comprising:

with regard to claim 161,

an elongate body (30) defining at least one lengthwise extending duct (24) disposed within a channel (85) defined by a solid surface (13);

at least one optical waveguide (contained within element 24; col. 4, lines 6 through 8) disposed within said at least one lengthwise extending duct defined by said elongate body; and

a filling material (col. 4, lines 50 through 52) overlying said elongate body and at least partially filling the channel;

with regard to claim 166,

wherein said elongate body defines a slot opening (30a) into the duct (col. 3, lines 59 through 61);

with regard to claim 167,

further comprising a cable in the duct, said cable comprising a tube (24) and said at least one optical waveguide disposed within said tube; and

with regard to claim 169,

wherein said solid surface is a road surface.

Gaylin '997 discloses all of the features of the claimed invention with the exception(s) of:

with regard to claim 161,

the filling material being selected from the group consisting of bitumen and hot melt adhesive;

with regard to claim 165,

the elongate body being sheathed by the filling material;

with regard to claim 170,

the solid surface being a paved structure; and

with regard to claim 171,

the solid surface defining the channel to have a depth of about 15 cm or less.

Kasiewicz '789, as seen in Figures 5 through 8, discloses a method and means for protecting buried fiber optic cable (col. 4, lines 33 through 37) from rodent damage, the means comprising bitumen (col. 2, line 68 through col. 3, line 6) applied so as to sheath the cable.

With regard to claims 161 and 165, it would have been obvious to one of ordinary skill in the art of cable laying at the time of invention to modify the structure shown by Gaylin '997 such that it would include bitumen filling material sheathed around the elongate body as taught by Kasiewicz '789 to provide the cable with additional means of protection.

With regard to claim 167, the recitation of the cable being inserted into the duct via the slot has not been given patentable weight. It has been held that process limitations in an apparatus claim do not impart patentability. In re Dike, 157 USPQ 581; In re Stephens, 145 USPQ 656; and In re Dilnot, 133 USPQ 289.

With regard to claim 170, it would have been well within the ordinary level of skill for one in the art of cable laying at the time of invention to make the surface of the structure shown by the combination of Gaylin '997 and Kasiewicz '789 a paved surface. The motivation for the modification would have been to facilitate laying of the at least one optical waveguide in a paved structure as desired.

With regard to claim 171, in view of the teaching by Gaylin '997 for a trench of any desired depth (col. 4, lines 52 through 56), it would have been obvious to one having ordinary skill in the art of cable laying at the time the invention was made to modify it such that the channel would have a depth of 15cm or less. The motivation would have been to minimize disturbance of the surface.

8. Claim 164 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaylin (U.S. Patent No. 4,896,997) in view of Kasiewicz (U.S. Patent No. 4,437,789) as applied to claim 161 above, and further in view of Crumpler (U.S. Patent No. 3,219,368).

Gaylin '997 in view of Kasiewicz '789 discloses all of the features of the claimed invention with the exception(s) of:

with regard to claim 164,

the elongate body comprising a plurality of barbs for engaging walls that define the channel.

Crumpler '368, as seen in Figure 12, shows a buried elongate body (10) comprising a plurality of barbs (12) to prevent rolling and add strength (col. 3, lines 41 through 42).

With regard to claim 164, it would have been obvious to one of ordinary skill in the art of conduits at the time of invention to modify the device shown by Gaylin '997 in view of Kasiewicz '789 with barbs as taught by Crumpler '368 to prevent rolling and add strength to the elongate body.

***Allowable Subject Matter***

9. Claims 128 and 155 would be allowable if rewritten to overcome the objections for minor informalities set forth in the above Office action.

10. Claims 162 and 163 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



11. Claims 123 through 127, 129 through 154, and 156 through 160 are allowed.

12. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

### *Conclusion*

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara L. Mayo whose telephone number is 703-305-3019. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 703-308-3870. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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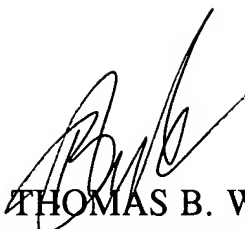
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A handwritten signature in black ink, appearing to be 'TLM', written in a cursive style.

TLM

18 March 2004

A handwritten signature in black ink, appearing to be 'Thomas B. Will', written in a cursive style.

THOMAS B. WILL  
SUPERVISORY PATENT EXAMINER  
GROUP 3600